

CLAIMS

1. A method for synchronizing a wakeup schedule for a Bluetooth module
 2 and a wakeup schedule for a CDMA module in a wireless mobile unit, said
 method comprising steps of:
 - 4 determining a next CDMA wakeup time; and
 synchronizing a new Bluetooth wakeup time to said next CDMA wakeup
 6 time when said next CDMA wakeup time is earlier than a next Bluetooth wakeup
 time.
2. The method of claim 1 further comprising a step of establishing said next
 2 Bluetooth wakeup time after said determining step and before said
 synchronizing step.
3. The method of claim 1 further comprising steps of:
 - 2 determining a current CDMA time; and
 determining a current Bluetooth time.
4. The method of claim 3 further comprising a step of determining a CDMA
 2 interval, said CDMA interval equaling said next CDMA wakeup time less said
 current CDMA time.
5. The method of claim 4 further comprising a step of synchronizing said
 2 new Bluetooth wakeup time to said next CDMA wakeup time when said current
 Bluetooth time plus said CDMA interval is less than said next Bluetooth time.

6. The method of claim 1 further comprising a step of performing a
2 Bluetooth wakeup process and a CDMA wakeup process substantially at said
new Bluetooth wakeup time.

7. The method of claim 6 wherein said performing step comprises a step of
2 powering on said Bluetooth module and said CDMA module substantially
simultaneously so as to reduce said wireless mobile unit's power consumption.

8. A method for synchronizing a wakeup schedule for a Bluetooth module
2 and a wakeup schedule for a CDMA module in a wireless mobile unit, said
method comprising steps of:
4 determining a current CDMA time and a current Bluetooth time;
calculating a CDMA interval, said CDMA interval equaling a next CDMA
6 wakeup time less said current CDMA time; and
synchronizing a new Bluetooth wakeup time to said next CDMA wakeup
8 time when said current Bluetooth time plus said CDMA interval is less than a
next Bluetooth time.

9. The method of claim 8 further comprising steps of:
2 establishing said next CDMA wakeup time prior to said step of calculating
said CDMA time interval; and
4 establishing said next Bluetooth wakeup time prior to said step of
synchronizing said new Bluetooth time.

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10. The method of claim 8 further comprising a step of performing a
2 Bluetooth wakeup process and a CDMA wakeup process substantially at said
new Bluetooth wakeup time.
11. The method of claim 10 wherein said performing step comprises a step
2 of powering on said Bluetooth module and said CDMA module substantially
simultaneously so as to reduce said wireless mobile unit's power consumption.
12. The method of claim 8 wherein said wireless mobile unit comprises a
2 Bluetooth-enabled CDMA cell phone.
13. A wireless mobile unit comprising:
2 a CDMA module configured to perform a CDMA wakeup process at a
next CDMA wakeup time; and
4 a processor configured to synchronize a new Bluetooth wakeup time to
said next CDMA wakeup time when said next CDMA wakeup time is earlier than
6 a next Bluetooth wakeup time.
14. The wireless mobile unit of claim 13 further comprising a Bluetooth
2 module configured to perform a Bluetooth wakeup process.
15. The wireless mobile unit of claim 14 wherein said Bluetooth module is
2 configured to perform said Bluetooth wakeup process at said new Bluetooth

wakeup time when said next CDMA wakeup time is earlier than said next

4 Bluetooth wakeup time.

16. The wireless mobile unit of claim 13 wherein said CDMA module
2 comprises a CDMA transmitter/receiver and a CDMA antenna, said CDMA
transmitter/receiver and said CDMA antenna being configured to receive a pilot
4 signal from a base station so as to synchronize said CDMA module with said
base station.

17. The wireless mobile unit of claim 16 wherein said CDMA module is
2 further configured to derive a current CDMA time from said pilot signal.

18. The wireless mobile unit of claim 17 wherein said Bluetooth module
2 comprises a clock, said clock being configured to track a current Bluetooth time.

19. The wireless mobile unit of claim 18 wherein said processor is further
2 configured to calculate a CDMA interval, said CDMA interval equaling said next
CDMA wakeup time less said current CDMA time.

20. The wireless mobile unit of claim 19 wherein said processor is further
2 configured to synchronize said new Bluetooth wakeup time to said next CDMA
wakeup time when said current Bluetooth time plus said CDMA interval is less
4 than said next Bluetooth time.

21. The wireless mobile unit of claim 14 wherein said CDMA module
2 performs said CDMA wakeup process and said Bluetooth module performs said
Bluetooth wakeup process substantially at said new Bluetooth wakeup time.

22. The wireless mobile unit of claim 21 wherein said CDMA module and
2 said Bluetooth module are configured to power on substantially simultaneously
so as to reduce said wireless mobile unit's power consumption.

23. The wireless mobile unit of claim 13 wherein said wireless mobile unit is
2 a Bluetooth-enabled CDMA cell phone.

24. A wireless unit comprising:
2 a means for performing a CDMA wakeup process at a next CDMA
wakeup time; and
4 a means for synchronizing a new Bluetooth wakeup time to said next
CDMA wakeup time when said next CDMA wakeup time is earlier than a
6 next Bluetooth wakeup time.

25. A wireless mobile unit comprising:
2 a memory means; and
a means for performing a CDMA wakeup process at a next CDMA
4 wakeup time and
for synchronizing a new Bluetooth wakeup time to said next CDMA wakeup time
6 when said next CDMA wakeup time is earlier than a next Bluetooth wakeup
time.

26. A digital signals processing apparatus, comprising:

- 2 a memory means for storing digital data; and
- a digital signal processing means for interpreting digital signals to
- 4 synchronize a wakeup schedule for a Bluetooth module and a wakeup schedule
- for a CDMA module in a wireless mobile unit by:
- 6 determining a next CDMA wakeup time; and
- synchronizing a new Bluetooth wakeup time to said next CDMA wakeup
- 8 time when said next CDMA wakeup time is earlier than a next Bluetooth wakeup
- time.

27. The apparatus of claim 26, said digital signal processing means further

- 2 interpreting digital signals to establish said next Bluetooth wakeup time after
- said determining a next CDMA wakeup time and before said synchronizing a
- 4 new Bluetooth wakeup time.